

WHAT IS CLAIMED IS

1. A formulation for targeting an infectious agent which acquires a HLA-DR host membrane protein during its life cycle or a HLA-DR expressing host cell or both, said formulation comprising a ligand capable of binding to said host membrane protein, said ligand being coupled to a lipid-comprising vesicle.
2. A formulation according to claim 1 wherein lipid-comprising vesicle is a liposome.
3. A formulation according to claim 2 wherein said liposome comprises a mixture of diacylphosphatidylcholine and diacylphosphatidylglycerol in a molar ratio ranging between 10:1 and 1:1, wherein the acyl chains are either saturated or unsaturated and have between 14 and 18 carbon atoms in length.
4. A formulation according to claim 3, wherein said lipid component comprises a polyethyleneglycol derivative of diacylphosphatidylethanolamine.
5. A formulation according to claim 4, wherein the polyethyleneglycol has a molecular weight comprises between about 500 and 5000 daltons.
6. A formulation according to claim 3, wherein the molar ratio is 10:3.
7. A formulation according to claim 4 ~~or 5~~, wherein said lipid component comprises a mixture of diacylphosphatidylcholine:diacylphosphatidylglycerol: diacylphosphatidylethanol-amine-polyethyleneglycol in a molar ratio of 10:3:0.1-3.

8. A formulation according to claim 2, ~~3 or 6~~, wherein said lipid component comprises a mixture of dipalmitoylphosphatidylcholine:dipalmitoylphosphatidylglycerol in a molar ratio of 10:3 or distearoylphosphatidylcholine:distearoylphosphatidylglycerol in a molar ratio of 10:3.

9. A formulation according to claim 2, ~~3, 4, 5 or 7~~, wherein said lipid component comprises a mixture of dipalmitoylphosphatidylcholine:dipalmitoylphosphatidylglycerol: dipalmitoylphosphatidylethanolamine-polyethyleneglycol in a molar ratio of 10:3:0.33 or dipalmitoylphosphatidylcholine:dipalmitoylphosphatidylglycerol:distearoylphosphatidylethanolamine-polyethyleneglycol in a molar ratio of 10:3:0.83.

10. A formulation according to ~~any one of claims 1 to 9~~, claim 1, wherein said host membrane protein further comprises one or more proteins selected from a histocompatibility complex protein, a membrane ATPase, thy-1, an interleukin receptor, annexin II, CD3 (T3), CD4 (T4), CD5 (T1), CD6 (T12), CD8 (T8), CD11a (LFA-1), CD11b (Mac-1), CD11c (gp150,95), CD1 (Lewis X), CD18, CD19, CD25 (Tac), CD30 (Ki-1), CD43 (leukosialin, sialophorin), CD44 (Pgp-1), CD48 (Blast-1), CD54 (ICAM-1), CD55 (DAF), CD59 (protectin, Mac inhibitor), CD63, CD71 (transferrin receptor), CDw108(GR2), cyclophilin A, cytoskeletal proteins and β_2 -microglobulin.

11. A formulation according to ~~any one of claims 1 to 10~~, claim 1, wherein said ligand is an antibody molecule selected from a whole antibody and an antibody fragment.

12. A formulation according to ~~any one of claims 1 to 11~~, claim 1, which comprises a drug effective against a disease or against the symptoms of a disease caused by said infectious agent.

13. A formulation according to ~~any one of claims 1 to 11~~, claim 1, wherein said host cell is a lymphoid cell or a cell of the reticuloendothelial system.

14. A formulation according to claim 12, wherein said host cell is a lymphoid cell or a cell of the reticuloendothelial system.

15. A formulation according to claim 13, wherein said infectious agent is HIV.

16. A formulation according to claim 14, wherein said infectious agent is HIV.

17. A formulation according to claim 13 ~~or 15~~, wherein said host membrane protein further comprises one or more of CD4, MHC-I or CD54.

18. A formulation according to claim 14 ~~or 16~~, wherein said host membrane protein further comprises one or more of CD4, MHC-I or CD54.

19. A formulation according to claim 12, ~~14, 16 or 18~~ wherein said drug is selected from AZT, ddl, ddC, 3TC, indinavir, saquinavir, ritonavir, nelfinavir, ganciclovir, foscarnet, ribavirin, amphotericin B and nystatin A.

20. A formulation according to ~~any one of claims 1 to 19~~, claim 1, wherein said protein is HLA-DR and said ligand is an anti-Fab' antibody fragment directed against said host membrane protein.

21. ~~The use of a formulation according to any one of claims 1 to 20~~ A method for treating or preventing a disease caused by said an infectious agent which acquires a HLA-DR host membrane protein during its life cycle or a HLA-DR expressing host cell or both, the method comprising the step of: administering a formulation according to claim 1.

22. ~~The use of a ligand~~ A method of making a formulation for targeting an infectious agent and its host cell, comprising the step of: coupling a ligand to a lipid-comprising vesicle, said ligand being to a host membrane protein which is acquired by an infectious agent during its life cycle, in the making of a formulation for targeting said infectious agent and its host cell, said ligand being coupled to a lipid-comprising vesicle and said protein does not consist of CD4 or of a HLA class 1 protein.

23. The method according to ~~The use as defined in claim 22, wherein said formulation is defined in claim 1 any one of claims 1 to 20.~~